Norman H. Bangerter
Governor

Suzanne Dandoy, M.D., M.P.H.
Executive Director

BAQE-030-87

December 28, 1987

Mr. Dennis Killian
Intermountain Power Project
P.O. Box 864
Delta, Utah 84624

Dear Mr. Killian:

Re: Approval Order for Coal Fired Steam-Electric Generating Station
Millard County, CDS A1

This new approval order is being issued to you as a result of the notice of violation which was issued to you on September 29, 1986.

The above-referenced project has been evaluated and found to be consistent with the requirements of the Utah Air Conservation Regulations (UACR) and the Utah Air Conservation Act. A 30-day public comment period was held and all comments received were evaluated. The conditions of this approval order reflect any changes to the proposed conditions which resulted from the evaluation of the comments received. This air quality approval order authorizes the project with the following conditions:

1. The main boilers shall be constructed and operated according to the specifications in the Contract Document Number 2010N, as submitted to the Executive Secretary on April 14, 1983.

2. The sulfur dioxide scrubbers for the main boilers shall be constructed and operated according to the specifications in the Contract Document Number 9255.62.0202, as submitted on April 14, 1983.

3. The fabric filters for the main boilers shall be constructed and operated according to the specifications in the Contract Document Number 9255.62.0203, as submitted on April 14, 1983.

4. No main boiler unit shall exceed 8.352×10^9 BTU/HR heat input rate, as determined by ASTM Method D3176, D2015-77, or D3286-82 and the coal feed rate measured by the plant instrumentation. Records of heat input will be kept for two years and made available to the

Kenneth L. Alkema, Director • Division of Environmental Health
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Executive Secretary upon request. Calibration of the plant coal feed rate meters shall be approved by the Executive Secretary. If coal other than bituminous is proposed for use, a notice of intent to modify shall be filed with the Executive Secretary in accordance with Section 3.1, UACR.

5. No main boiler unit shall discharge to the atmosphere:

   A. Particulate matter at a rate exceeding:

      (1) 0.020 lb/10^6 BTU heat input

   B. Sulfur dioxide at a rate exceeding:

      (1) 0.150 lb/10^6 BTU heat input

      (2) 10.0 percent of the potential combustion concentration

   C. Nitrogen oxides at a rate exceeding:

      (1) 0.550 lb/10^6 BTU heat input

   D. Visible emissions in excess of 20% opacity

6. The emission limitations in Paragraph 5 above shall be determined by the following procedures:

   A. Particulate matter: 40 CFR 60.48a, (a(1-6))

   B. Sulfur dioxide: 40 CFR 60.48 x a, (b(1 and 2)) (30-day average)

   C. Nitrogen oxides: 40 CFR 60.48a, (c), (30-day average)

   D. Opacity: 40 CFR 60, Appendix A, Method 9, and/or by six-minute averages of the output of the continuous emission monitor required by 40 CFR 60.47(a) and Section 4.6, Utah Air Conservation Regulations (UACR)

   E. Performance testing shall be completed by the time frame required by 40 CFR 60.8a. For the purpose of 40 CFR 60.8a, maximum production rate shall be a boiler heat input of 7.517×10^9 BTU/HR and initial start-up shall be the first day electricity is produced by the generator

7. Emissions of particulate matter from the following dust collectors shall not exceed a concentration of 0.024 gr/dscf and the following rates:

   A. (1) Rail car unloading (4 units) — 15.3 LBS/HR each unit
      (2) Transfer building one — 7.1 LBS/HR

(3)	Unit one 13A	6.9 LBS/HR
(4)	Transfer building two	5.5 LBS/HR
(5)	Transfer building four	3.7 LBS/HR
(6)	Crusher building one	3.8 LBS/HR
(7)	Unit one 13B	3.5 LBS/HR
(8)	Unit two 14A	4.1 LBS/HR
(9)	Unit two 14B	3.5 LBS/HR
(10)	Limestone preparation building	3.5 LBS/HR

B. Stack testing of the dust collectors listed in 7.A (1, 2, and 3 above) shall be completed within 60 days of start-up of each unit. Stack testing of collectors listed in 7.A (4 through 10) shall be as directed by the Executive Secretary. Ducting of gas flow from those dust collectors shall be designed to meet the requirements of 40 CFR 60, Appendix A, Method 1. 40 CFR 60, Methods 2 - 5 shall be used for testing.

8. Visible emissions from the following dust collectors shall not exceed 20% opacity as determined by 40 CFR 60, Appendix A, Method 9:

A. Coal truck unloading
B. Reserve reclaim
C. Limestone truck unloading hopper
D. Reclaim hopper
E. Crusher building
F. Each of the dust collectors listed in 7.A 1 through 10

9. Fugitive emissions from the following sources shall be minimized by using the control techniques herein, and visible emissions from these sources shall not exceed 20% opacity and shall be evaluated in accordance with Section 4.1.9, UACR:

A. Coal and limestone conveyor belts - enclosed on three sides

B. Coal dumpers - underground receiving

C. Coal stack out - telescopic spout and wet suppression

D. Coal and limestone reclaim - underground plow

E. Coal and limestone storage active pile - residual moisture

F. Coal and limestone reserve pile - compacting and crusting agent

G. Limestone stack out - telescopic spout

H. Fly ash silo unloading - mix with scrubber sludge

I. Coal and limestone haul road - paved

J. Solid waste area access road - $CaCl_2$ or other dust suppressant treatment

K. Solid waste haul road - watering

L. Solid waste/soil stockpile - watering

M. Solid waste burial pile - compaction and reseeding

N. Limestone dumpers - Burnley baffles and underground receiving

NOTE: A fugitive dust control plan shall be submitted to the Executive Secretary for approval prior to start-up of the specific operations and shall include as a minimum: control techniques proposed, quantity of suppressant (where applicable) and frequency of application (where applicable).

10. Reports required by 40 CFR 60.49a shall be submitted to the Executive Secretary within the time frame specified in (i) of that part.

11. A quality control program for the continuous monitoring system required by 40 CFR 60.47a and Section 4.6, UACR, must be developed and implemented. As a minimum, the quality control program must have written procedures for each of the following activities:

    A. Installation of CEMs
    B. Calibration of CEMs
    C. Zero and calibration checks and adjustments for CEMs
    D. Preventive maintenance for CEMs (including parts inventory)
    E. Data recording and reporting
    F. Program of corrective action for inoperable CEMs
    G. Annual evaluation of CEM system

    The quality control program must be described in detail, suitably documented and approved by the Executive Secretary prior to the date of performance testing.

12. The auxiliary boilers shall be installed according to the specifications in the letter dated March 27, 1984.

13. No auxiliary boiler unit shall discharge to the atmosphere emissions in excess of any of the following rates or concentrations:

    A. Particulate - .10 LBS/10^6 BTU, 20 LB/HR
    B. SO_2 - .69 LBS/10^6 BTU, 100 LB/HR
    C. NO_x - .35 LBS/10^6 BTU, 58 LB/HR

14. Compliance with the emission limitations of Paragraph 13 shall be determined with the following test methods:

A. Particulate - 40 CFR 60, Appendix A, Methods 1-5
B. SO_2 - 40 CFR 60, Appendix A, Methods 1-4 and 6 or 8
C. NO_x - 40 CFR 60, Appendix A, Methods 1-4 and 7

15. Stack testing for demonstration of compliance with the particulate standard of Paragraph 13 shall be performed within 60 days of initial start-up of the auxiliary boilers. Stack testing for SO_2 and NO_x shall be performed if directed by the Executive Secretary.

16. Visible emissions from the auxiliary boilers shall not exceed 20% opacity as determined by 40 CFR 60, Appendix A, Method 9.

17. Sulfur content of the fuel combusted in the auxiliary boilers shall not exceed .58% by weight as determined by ASTM Method D-4239-83, Section 3. Each delivery of fuel shall be tested. Records of test results shall be maintained and shall be made available to the Executive Secretary upon request for two years. A summary of each quarter's test results shall be submitted with the quarterly CEM report. The summary shall contain the average sulfur content expressed as percent weight for the quarter.

18. Combined annual fuel oil consumption of the two auxiliary boilers shall not exceed the following:

    First year of operation from July 1, 1985 to June 30, 1986 - 250,000 barrels (equivalent to 50% capacity factor).

    Second year of operation from July 1, 1986 to June 30, 1987 - 150,000 barrels (equivalent to 30% capacity factor).

    All subsequent years - 50,000 barrels (equivalent to 10% capacity factor).

19. Malfunctions of process or air pollution control equipment shall be reported and handled in accordance with Section 4.7, UACR, and 40 CFR 60.46a.

20. Post construction monitoring of ambient air for at least one year after start-up is required. A monitoring and quality assurance plan for post construction monitoring must be submitted for approval by the Executive Secretary no later than six months before initial start-up of either boiler.

21. All installations and facilities authorized by this approval order shall be maintained and operated in proper condition.

22. The Executive Secretary shall be notified upon start-up/normal operations as an initial compliance inspection is required.

23. This approval order shall replace the approval order issued to IPP dated December 19, 1985.

Any future modifications to the equipment approved by this order must also be approved in accordance with Section 3.1.1, UACR.

The fee for issuing this approval order is $786.40. The amount (see enclosure for breakdown of costs) is payable to the Utah Department of Health, sent to the Executive Secretary, Utah Air Conservation Committee, 288 North 1460 West, P.O. Box 16690, Salt Lake City, Utah 84116-0690 and is due within 30 days after receipt of this approval order. Please return payment in the enclosed self-addressed envelope.

Sincerely,

F. Burnell Cordner

F. Burnell Cordner
Executive Secretary
Utah Air Conservation Committee

FBC/DK/sh

cc: EPA Region VIII (John Dale)
Central Utah Health District